AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-4 (canceled).

Claim 5 (new): An elongated magnetic sensor comprising:

magnetoresistive devices arranged in a longitudinal direction thereof, each including a magnetosensitive unit having magnetosensitive elements arranged at intervals in the longitudinal direction and connection conductors connecting the magnetosensitive elements in series; wherein

intervals between the magnetosensitive elements disposed at opposite ends of adjacent magnetoresistive devices in a longitudinal direction are less than or equal to intervals between adjacent magnetosensitive elements within each of the magnetoresistive devices in the longitudinal direction.

Claim 6 (new): The elongated magnetic sensor according to Claim 5, wherein the intervals between the magnetosensitive elements disposed at the opposite ends of the adjacent magnetoresistive devices in the longitudinal direction are substantially equal to the intervals between the adjacent magnetosensitive elements within each of the magnetoresistive devices in the longitudinal direction.

Claim 7 (new): The elongated magnetic sensor according to Claim 5, wherein

the magnetosensitive unit includes first and second magnetosensitive element arrays arranged substantially perpendicularly to the longitudinal direction; and

the magnetosensitive elements are arranged such that locations of the magnetosensitive elements of the first magnetosensitive element array in the longitudinal direction, when viewed in a lateral direction, differ from locations of the magnetosensitive elements of the second magnetosensitive element array in the longitudinal direction.

Claim 8 (new): The elongated magnetic sensor according to Claim 5, wherein the connection conductors are not disposed at the ends of the magnetoresistive devices in the longitudinal direction.

Claim 9 (new): The elongated magnetic sensor according to Claim 5, wherein the magnetosensitive elements are connected in series through the connection conductors in a meandering pattern.

Claim 10 (new): The elongated magnetic sensor according to Claim 5, wherein the magnetosensitive elements are connected in series through the connection conductors in a linear pattern.

Claim 11 (new): The elongated magnetic sensor according to Claim 5, wherein the intervals between the magnetosensitive elements disposed at opposite ends of adjacent magnetoresistive devices in the longitudinal direction are less than the intervals between adjacent magnetosensitive elements within each of the magnetoresistive devices in the longitudinal direction.

Claim 12 (new): An elongated magnetic sensor comprising:

a plurality of magnetoresistive devices arranged in a longitudinal direction thereof;

each of said plurality of magnetoresistive devices including a magnetosensitive unit having magnetosensitive elements arranged at intervals in the longitudinal direction and connected in series; wherein

intervals between the magnetosensitive elements disposed at opposite ends of adjacent ones of the plurality of magnetoresistive devices in the longitudinal direction are less than or equal to intervals between adjacent magnetosensitive elements within each of the plurality of magnetoresistive devices in the longitudinal direction.

Claim 13 (new): The elongated magnetic sensor according to Claim 12, wherein the magnetosensitive elements of each of the plurality of magnetoresistive devices are connected in series via connection conductors.

Claim 14 (new): The elongated magnetic sensor according to Claim 12, wherein the intervals between the magnetosensitive elements disposed at the opposite ends of the adjacent magnetoresistive devices in the longitudinal direction are substantially equal to the intervals between the adjacent magnetosensitive elements within each of the magnetoresistive devices in the longitudinal direction.

Claim 15 (new): The elongated magnetic sensor according to Claim 12, wherein

the magnetosensitive unit includes first and second magnetosensitive element arrays arranged substantially perpendicularly to the longitudinal direction; and

the magnetosensitive elements are arranged such that locations of the magnetosensitive elements of the first magnetosensitive element array in the longitudinal direction, when viewed in a lateral direction, differ from locations of the magnetosensitive elements of the second magnetosensitive element array in the longitudinal direction.

Claim 16 (new): The elongated magnetic sensor according to Claim 13, wherein the connection conductors are not disposed at the ends of the magnetoresistive devices in the longitudinal direction.

Claim 17 (new): The elongated magnetic sensor according to Claim 13, wherein the magnetosensitive elements are connected in series through the connection conductors in a meandering pattern.

Claim 18 (new): The elongated magnetic sensor according to Claim 13, wherein the magnetosensitive elements are connected in series through the connection conductors in a linear pattern.

Claim 19 (new): The elongated magnetic sensor according to Claim 12, wherein the intervals between the magnetosensitive elements disposed at opposite ends of adjacent magnetoresistive devices in the longitudinal direction are less than the intervals between adjacent magnetosensitive elements within each of the magnetoresistive devices in the longitudinal direction.